

## ABSTRACT

Antibodies capable of recognizing many types of proteins having methyllysine residues are established by immunizing an animal with a chemically methylated protein other than histone and subsequent screening or the like depending on the reactivity to a protein obtained by chemically methylating a protein other than the protein used in the immunization. A process for producing such an antibody is also established. These antibodies are useful in searching for and studying various methylated proteins and are particularly useful in regulating the functions of biological molecules wherein the methylation of a lysine residue plays an important role, and in diagnosing a disease by detecting a methyllysine-containing protein.